

ship Sept 8

ASAP.

Work Order ID 150747

150747

Page 1

Thursday, September 01, 2016 7:35:18 AM

Item ID: 647.3703 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: 204,205,212,214 Cable Cutter System, Standard
 Start Date: 9/1/2016 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 9/8/2016 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: dm Date: 16/09/01 Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
647.3700	NC3								
100	DOCUMENT CONTROL	0.00							
100									
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP 647.3703								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.01							
Quality Control									

SEP 01 2016

DAS
6
9-89

DAS
27
9-89

SEP 02 2016

(Handwritten signature)

SEP 01 2016

DAS
31
9-89

DAS
27
9-89

SEP 02 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 150747

Thursday, September 01, 2016 7:35:18 AM

150747

Page 2

Item ID: 647.3703

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Start Qty: 1.00

1

Cust Item ID:

Required Date: 9/8/2016

Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

130

Packaging

Packaging

Memo

0.00

Identify and pack for shipping as per PPP 647.3703
Location: _____*Sold*

DAS

27

9-89

SEP 02 2016

140

140

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.02

[Signature]

SEP 02 2016

dem 10/09/02

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Page 1

Thursday, September 01, 2016 7:35:17 AM

Work Order ID: 150747

150747

Parent Item: 647.3703

647 3703

Parent Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Required Date: 9/8/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 12.10.26 NEW ISSUE DD VERF:JLM
REV:B 15.01.26 as per ecr 14-214 DD VERF:JLM
PER REV NC3 15.03.18 JLM VERIFIED BY:DD

IPP
IPP REV:C AS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

647.3903		Manufactured	No				Each	2.0000		1			
647 3903									**				
Deflector Assembly													

Location	Loc Qty	Loc Code
cck024	2	
147126	2	

647.3802		Manufactured	No			110	Each	10.0000	1				
647 3802									**				
212 Upper Cutter Assy													

Location	Loc Qty	Loc Code
cck030	10	
124717	10	

647.3803		Manufactured	No			110	Each	3.0000	1	1			
647 3803									**				
Lower Cutter Assembly													

Location	Loc Qty	Loc Code
cck029	3	
145480	2	
148435	1	

647.4410		Manufactured	No			110	Each	9.0000	1	1			
647 4410									**				
Rail													

Location	Loc Qty	Loc Code
CCK081	9	
120986	9	

SEP 01 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Thursday, September 01, 2016 7:35:17 AM

Work Order ID: 150747

150747

Parent Item: 647.3703

647 3703

Parent Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Required Date: 9/8/2016

Start Qty: 1.00

Required Qty: 1.00

647.4010 Manufactured No

110 Each 13.0000 1 1

647 4010

Wiper Deflector RH

PC

DAS
31
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck060

13

120740

13

647.4011 Manufactured No

110 Each 11.0000 1 1

647 4011

Wiper Deflector LH

PC

DAS
31
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck060

11

120741

11

647.4110 Manufactured No

110 Each 9.0000 1 1

647 4110

Doubler

PC

DAS
31
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK080

9

120987

9

647.4111 Manufactured No

110 Each 10.0000 1 1

647 4111

Doubler

PC

DAS
31
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck111

10

120743

10

647.4112 Manufactured No

110 Each 9.0000 1 1

647 4112

Clip

PC

DAS
31
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK112

9

145327

9

SEP 01 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date: _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____			
Misidentified	☐	Past Due	☐				

Picklist Print

Thursday, September 01, 2016 7:35:17 AM

Page 3

Work Order ID: 150747

150747

Parent Item: 647.3703

647 3703

Parent Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Required Date: 9/8/2016

Start Qty: 1.00

Required Qty: 1.00

647.4113
647 4113
Clip

Manufactured No

110

Each

9.0000

1

1

pc

DAS
31
9-89

Location

Loc Qty

Loc Code

CCK112

9

145488

9

647.4114
647 4114
Shim

Manufactured No

110

Each

25.0000

2

2

pc

DAS
31
9-89

Location

Loc Qty

Loc Code

CCK112

25

120746

25

647.4115
647 4115
Shim

Manufactured No

110

Each

10.0000

2

2

pc

DAS
31
9-89

Location

Loc Qty

Loc Code

CCK112

10

120747

10

647.4116
647 4116
Shim

Manufactured No

110

Each

14.0000

1

1

pc

DAS
31
9-89

Location

Loc Qty

Loc Code

CCK112

14

121064

14

SEP 01 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐				

Picklist Print

Thursday, September 01, 2016 7:35:17 AM

Page 4

Work Order ID: 150747

150747

Parent Item: 647.3703

647 3703

Parent Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Required Date: 9/8/2016

Start Qty: 1.00

Required Qty: 1.00

647.4210 Manufactured No

110 Each 9.0000 1 1

647 4210

Bracket LH

PC DAS 31 9-09

DAS 27 9-09

Location

Loc Qty

Loc Code

CCK112

9

120749

1

121086

8

647.4211 Manufactured No

110 Each 9.0000 1 1

647 4211

Bracket RH

PC DAS 31 9-09

DAS 27 9-09

Location

Loc Qty

Loc Code

CCK112

9

121134

9

647.4212 Manufactured No

110 Each 3.0000 1 1

647 4212

Plate

PC DAS 31 9-09

DAS 27 9-09

Location

Loc Qty

Loc Code

CCK112

3

m129702

3

647.4311 Manufactured No

110 Each 8.0000 1 1

647 4311

RH Lower Strut

PC

SEP 01 2016

DAS 27 9-09

Location

Loc Qty

Loc Code

CCK073

8

126397

8

DAS 31 9-09

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

Picklist Print

Thursday, September 01, 2016 7:35:17 AM

Work Order ID: 150747

150747

Parent Item: 647.3703

647 3703

Parent Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Required Date: 9/8/2016

Start Qty: 1.00

Required Qty: 1.00

647.4310 Manufactured No 110 Each 12.0000 1 1

647 4310

LH Lower Strut

PC
DAS
31
9-89

Location

Loc Qty

Loc Code

cck066

12

126395

12

647.4312 Manufactured No 110 Each 6.0000 1 1

647 4312

LH Upper Strut

PC
DAS
31
9-89

Location

Loc Qty

Loc Code

CCK67

6

147045

6

647.4313 Manufactured No 110 Each 6.0000 1 1

647 4313

RH Upper Strut

PC
DAS
31
9-89

Location

Loc Qty

Loc Code

cck068

6

147046

6

NAS1149FN832P Purchased No 110 Each 1,720.000 34 34

NAS1149FN832P

Washer

PC
DAS
31
9-89
SEP 01 2016

Location

Loc Qty

Loc Code

GA

1553

M133316

16

M133769

89

M135058

1448

ST263

167

M134257

167

34

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

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Work Order ID: 150747

150747

Parent Item: 647.3703

647 3703

Parent Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Required Date: 9/8/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0332P

Purchased

No

110

Each

2,919.000

157

157

NAS1149F0332P

Washer

PC

DAS
31
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

282

m133709

282

ST262

2637

m135058

637

m135544

2000

157

MS27039-1-07

Purchased

No

110

Each

317.0000

12

12

MS27039-1-07

Screw

PE

DAS
31
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

270

125654

270

Return2016

1

m127813

1

ST281

46

m135015

46

12

MS27039-1-10

Purchased

No

110

Each

12.0000

42

42

MS27039-1-10

SCREW

MB4676 V42

DAS
31
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

12

m129541

12

SEP 01 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

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Work Order ID: 150747

150747

Parent Item: 647.3703

647 3703

Parent Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Required Date: 9/8/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-08-08

Purchased

No

110

Each

370.0000

16

16

MS27039-08-08

Screw

PC

DAS
31
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CA

8

m130113

8

over006

200

m130325

200

ST278

150

m130113

143

m134142

7

ST282

12

m129541

12

16

MS27039-1-09

Purchased

No

110

Each

239.0000

14

14

MS27039-1-09

Screw

PC

DAS
31
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FP001

34

18057

34

GA

36

124859

36

ST280

169

m135056

169

14

MS27039-08-11

Purchased

No

110

Each

309.0000

2

2

MS27039-08-11

SCREW

PC

DAS
31
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST278

309

m133769

9

m134676

300

2

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____			
Misidentified	☐	Past Due	☐				

Picklist Print

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Work Order ID: 150747

150747

Parent Item: 647.3703

647 3703

Parent Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Required Date: 9/8/2016

Start Qty: 1.00

Required Qty: 1.00

MS24694-S49

Purchased

No

110

Each

216.0000

1

1

MS24694-S49

Screw

**

PC

DAS
31
9-89

Location

Loc Qty

Loc Code

ST284

216

m129499

100

m129702

116

MS24694-C53

Purchased

No

110

Each

32.0000

8

8

MS24694-C53

Screw

**

PC

DAS
31
9-89

Location

Loc Qty

Loc Code

ST285

32

m129702

32

601.3073

Purchased

No

110

Each

6.0000

1

1

601 3073

Connector

**

PC

DAS
31
9-89

Location

Loc Qty

Loc Code

CCK099

6

M134739

1

M135532

5

AN3-4A

Purchased

No

110

Each

159.0000

3

3

AN3-4A

Bolt

**

PC

DAS
31
9-89

Location

Loc Qty

Loc Code

ST350

159

m134955

159

DAS
27
9-89

SEP 01 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

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Work Order ID: 150747

150747

Parent Item: 647.3703

647.3703

Parent Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Required Date: 9/8/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-11A

Purchased

No

110

Each

149.0000

8

8

AN3-11A

Bolt

**

PC

DAS
31
9-89

Location

Loc Qty

Loc Code

over003

100

m135390

100

ST349

49

m134852

49

AN3C10A

Purchased

No

110

Each

16.0000

2

2

AN3C10A

Bolt

**

PC

DAS
31
9-89

Location

Loc Qty

Loc Code

ST349

16

m135056

16

601.3082

Purchased

No

110

Each

0.0000

6

6

601.3082

RIVET

CR3212-4-1

CR3212-4-2

CR3212-4-2

Cherry Rivet

**

6

M130388 PC

DAS
31
9-89

Location

Loc Qty

Loc Code

ST320

54

M130388

54

CR3212-4-3

Purchased

No

110

Each

100.0000

17

17

CR3212-4-3

Cherry Rivet

**

17

x M119017 PC

DAS
31
9-89

Location

Loc Qty

Loc Code

CCK003

100

m135408

100

SEP 01 2016

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

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Thursday, September 01, 2016 7:35:18 AM

Work Order ID: 150747

150747

Parent Item: 647.3703

647 3703

Parent Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Required Date: 9/8/2016

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-4 CR3212-4-04 Purchased No

110 Each

0.0000 7

CR3212-4-4

CHERRY RIVET

CCR264SS3-04

Purchased No

110 Each

388.0000 12

QxM134943 PC

CCR264SS3-04

Rivet

Location

Loc Qty

Loc Code

CCK003

388

123785

388

110 Each

254.0000 16

CCR264SS-3-03

Purchased

No

CCR264SS-3-03

Cherry Rivet

Location

Loc Qty

Loc Code

LG001

93

m128606

25

m134023

68

ST321

161

m135127

161

110 Each

179.0000 31

CR3213-4-2

Purchased

No

CR3213-4-2

Cherry Rivet

Location

Loc Qty

Loc Code

CCK003

100

m134058

100

ST320

79

123301

79

SEP 01 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :			
Misidentified	☐	Past Due	☐				

Picklist Print

Thursday, September 01, 2016 7:35:18 AM

Work Order ID: 150747

150747

Parent Item: 647.3703

647 3703

Parent Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Required Date: 9/8/2016

Start Qty: 1.00

Required Qty: 1.00

CR3213-4-3

Purchased

No

110

Each

234.0000

24

24

CR3213-4-3

Rivet, Cherry

PC

DAS
31
9-89

Location

Loc Qty

Loc Code

CCK003

200

m135135

100

m135470

100

ST319

34

m131340

34

24

CR3213-4-4

Purchased

No

110

Each

441.0000

16

CR3213-4-4

Rivet, Cherry

16

x m135056

PC

DAS
31
9-89

Location

Loc Qty

Loc Code

CCK003

400

M135408

100

M135536

300

ST319

41

M130388

35

M134962

6

28

CR3213-4-5

Purchased

No

110

Each

225.0000

28

CR3213-4-5

Rivet

16x M135 135 P

12x m134962 PC

DAS
31
9-89

Location

Loc Qty

Loc Code

CCK003

100

M129913

100

ST319

125

M129913

125

SEP 01 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

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Thursday, September 01, 2016 7:35:18 AM

Work Order ID: 150747

150747

Parent Item: 647.3703

647 3703

Parent Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Required Date: 9/8/2016

Start Qty: 1.00

Required Qty: 1.00

CR3213-4-8	Purchased	No	110	Each	84.0000	4	4
CR3213-4-8							
Rivet							

**

PC

DAS
31
9-89

			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>		
MS21042-3	Purchased	No	ST319	84	0.0000	79	
			123785	84			

**

4
79

M 135 135

DAS
31
9-89

MS21042-3

Nut

MS21042-08	Purchased	No	110	Each	33.0000	18	
------------	-----------	----	-----	------	---------	----	--

**

18

M 135 133 PC

DAS
31
9-89

MS21042-08

USE MS21042L08

			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>		
MS21047L06	Purchased	No	ST304	25	16.0000	6	6
			122815	25			
			ST306	8			
			m130388	8			

**

PC

DAS
31
9-89

MS21047L 06

Nut Plate

			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>		
MS21047L08	Purchased	No	ST303	16	9.0000	6	6
			m131340	16			

**

6

1x m 135 566

DAS
31
9-89

MS21047L 08

Nut Plate

SNB 09/06/16
* ship short X1 PM
ship Tues or Wed.

			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>		
			ST301	9			
			m129702	9			

5

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
		OTHER : ☐							

Picklist Print

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Thursday, September 01, 2016 7:35:18 AM

Work Order ID: 150747

150747

Parent Item: 647.3703

647 3703

Parent Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Required Date: 9/8/2016

Start Qty: 1.00

Required Qty: 1.00

MS21047-3

Purchased

No

110

Each

99.0000

4

4

MS21047-3

Nut Plate

**

PC

DAS
31
9-89

Location

Loc Qty

Loc Code

ST301

99

m135297

99

4

MS21071L3

Purchased

No

110

Each

130.0000

4

4

MS21071L3

ANCHOR NUT

**

PC

DAS
31
9-89

Location

Loc Qty

Loc Code

S299

100

125654

100

ST299

30

m129702

30

4

601.3083

Manufactured

No

110

Each

2.0000

1

1

601 3083

Adhesive Rubber Seal

**

PC

DAS
31
9-89

Location

Loc Qty

Loc Code

ckk009

2

m134349

2

1

601.1012

600.1012

Purchased

No

110

Each

0.0000

1

1

601 1012

Sealant (One 6 oz)

**

PC M135135

DAS
31
9-89

SEP 01 2016

03/12/2017

Thursday, September 01, 2016 7:35:18 AM

Shop Packet Print

Page 13

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

Picklist Print

Page 14

Thursday, September 01, 2016 7:35:18 AM

Work Order ID: 150747

150747

Parent Item: 647.3703

647 3703

Parent Item Name: 204,205,212,214 Cable Cutter System, Standard

Start Date: 9/1/2016

Required Date: 9/8/2016

Start Qty: 1.00

Required Qty: 1.00

601.2045

Purchased

No

110

Each

10.0000

1

1

601 2045

RTV (LOCTITE 598)McMaster p/n: 6641A41

PZ

DAS
31
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK096

2

m135138

2

GA

8

m134260

8

SEP 01 2016

Thursday, September 01, 2016 7:35:18 AM

Shop Packet Print

Page 14

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____			
Misidentified	☐	Past Due	☐				



APICAL INDUSTRIES, INC.
dba DART AEROSPACE

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

ENGINEERING CHANGE NOTICE NO.

04845

SHEET 1 OF 1

DWG NO. 647.3700

REV: N/C PREPARED BY

J. BECKER

DATE: 02/11/15

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: 412 CABLE CUTTERS KIT

APPROVED BY: ENGR

[Signature]

MFG

[Signature]

QC

[Signature]

EFF. NEXT ORDER

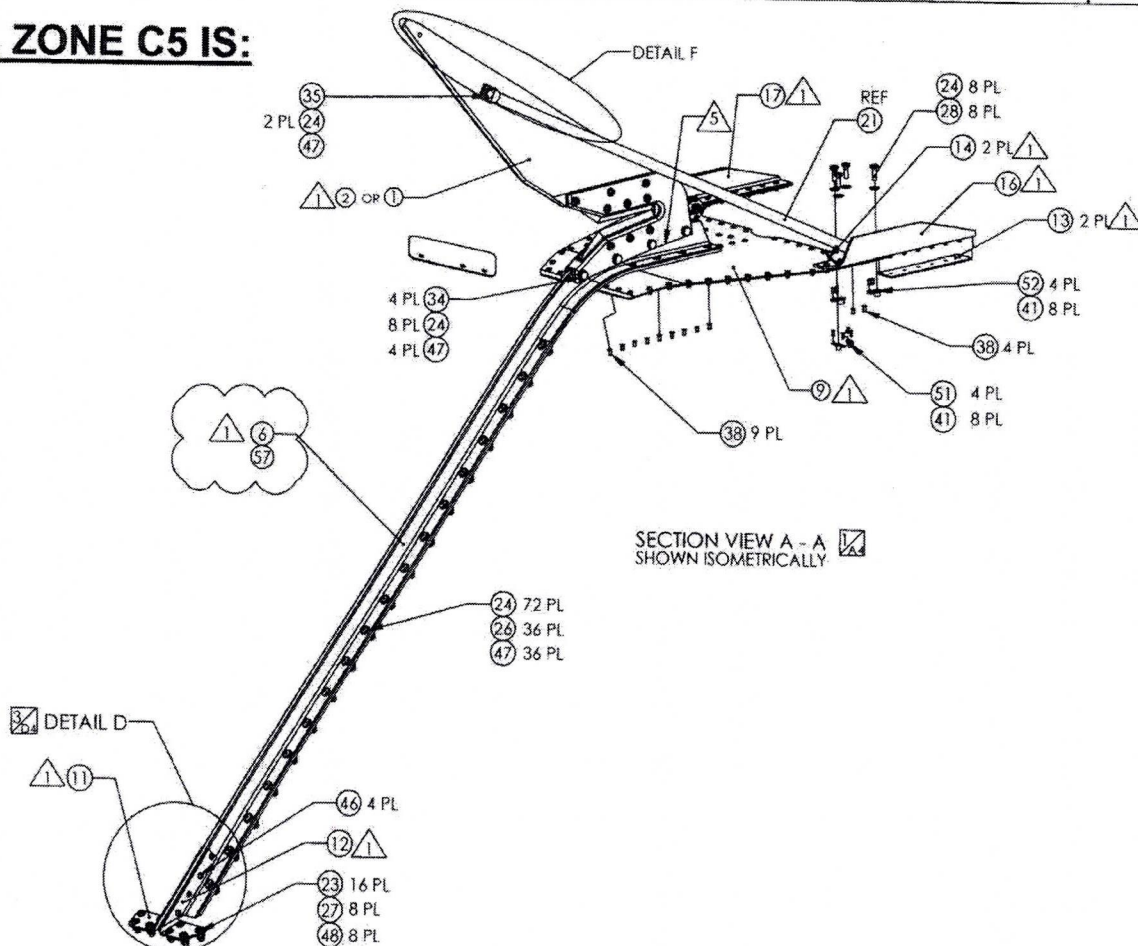
REASON: ADDED F/N 57

ECR:

ACTION ITEM:

1.

SHEET 1, ZONE C5 IS:



57	A	647.3916	1	1	1	1	DEFLECTOR UPPER HALF					
F/N	TC	PART NUMBER	3704	3703	3702	3701	DESCRIPTION				MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:			QTY								CHANGE CATEGORY	
											DER REVIEW REQUIRED	
											☐ PATTERN ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM	
											☐ MAJOR ☒ MINOR	
											☐ YES ☒ NO	

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO. 02728

SHEET 1 OF 1

DWG NO. 647.3700

REV: NC

PREPARED
BY

R. ROSANO

DATE: 12/23/09

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: 412 CABLE CUTTERS KIT

APPROVED BY:

ENGR

KMFC

QC

EFFI

~~NEXT ORDER~~

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: ADDED MODEL 214 TO APPROPRIATE DESCRIPTIONS

SHEET 1, ZONE D7 IS:

						647.3704	204, 205, 212, 214 CABLE CUTTERS KIT HIGH		
						647.3703	204, 205, 212, 214 CABLE CUTTERS KIT LOW		
						647.3702	412 CABLE CUTTERS KIT HIGH		
						647.3701	412 CABLE CUTTERS KIT LOW		
		.3704	.3703	.3702	.3701	FIND PART #	DESCRIPTION	MAT'L	SPEC.

is

F/N	TC	PART NUMBER	2901
-----	----	-------------	------

[illegible]

DESCRIPTION

MATERIAL

SPECIFICATION

DOCUMENTS EFFECTED:

☒ MDL ☒ INSTALL INSTRU ☒ ICA ☒ BOM

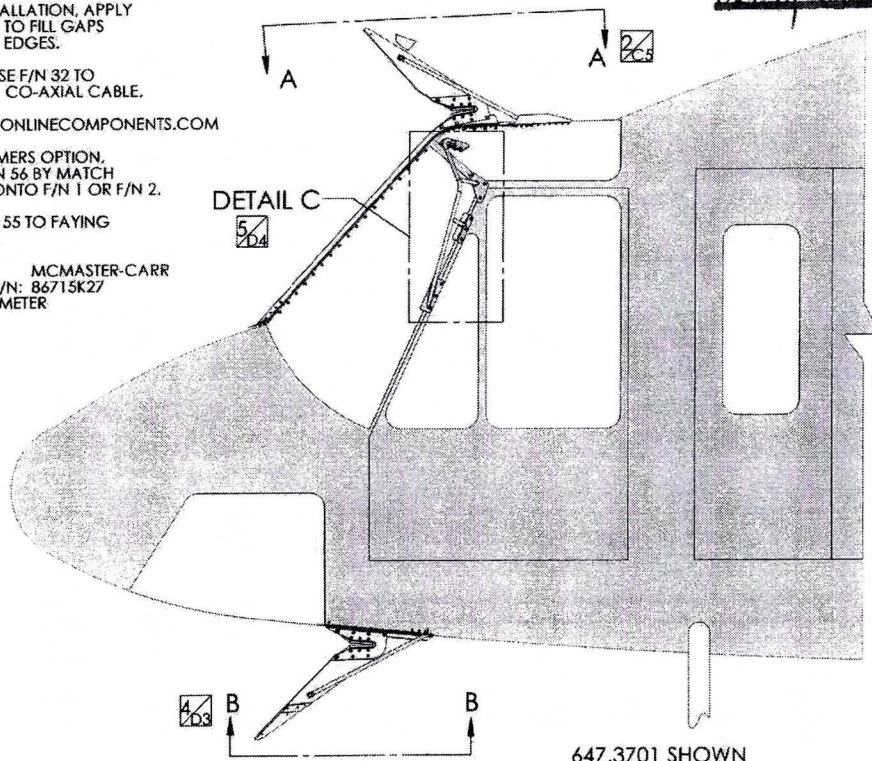
CHANGE CATEGORY
☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED
☒ YES ☐ NO

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

NOTES:

- 1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.
- 2 IF REQ'D, USE F/N 32 TO CONNECT CO-AXIAL CABLE.
- 3 VENDOR : ONLINECOMPONENTS.COM
- 4 AT CUSTOMERS OPTION, INSTALL F/N 56 BY MATCH DRILLING ONTO F/N 1 OR F/N 2.
- 5 APPLY F/N 55 TO FAYING SURFACES.
- 6 VENDOR : MCMMASTER-CARR
VENDOR P/N: 86715K27
60A DUROMETER



647.3701 SHOWN

REF	REF	REF	REF	56	647.5701	GPS MOUNT KIT		
A/R	A/R	A/R	A/R	55	601.2045	RTV	LOCITE 998	4
A/R	A/R	A/R	A/R	54	601.1012	SEALANT	PR-1425 CLASS B	5
1	1	1	1	53	601.3083	ADHESIVE RUBBER SEAL	MIL-R-3065	6
4	4	4	4	52	601.2957	NUTPLATE	MS21071L3	
4	4	4	4	51	600.0795	NUTPLATE	MS21047-3	
6	6	6	6	50	601.3066	NUTPLATE	MS21047106	
6	6	6	6	49	601.3065	NUTPLATE	MS21047106	
18	18	18	18	48	601.2973	LOCKNUT	MS21042-08	
79	79	79	79	47	601.2943	LOCKNUT	MS21042-3	
4	4	4	4	46	601.2364	CERRY RIVET	CR3213-4-8	
28	28	42	42	45	601.1183	CERRY RIVET	CR3213-4-5	
16	16	19	19	44	601.1915	CERRY RIVET	CR3213-4-4	
24	24	32	32	43	601.0790	CERRY RIVET	CR3213-4-3	
31	31	13	13	42	601.1039	CERRY RIVET	CR3213-4-2	
3704	3703	3702	3701	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.

UNINCORPORATED ECN(s)

02228, 04845, 04881

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE REVISION: PRI		N/C
2	INITIAL RELEASE	08-24-07	P. BRAVO

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QTY

NEXT ASSY (S)

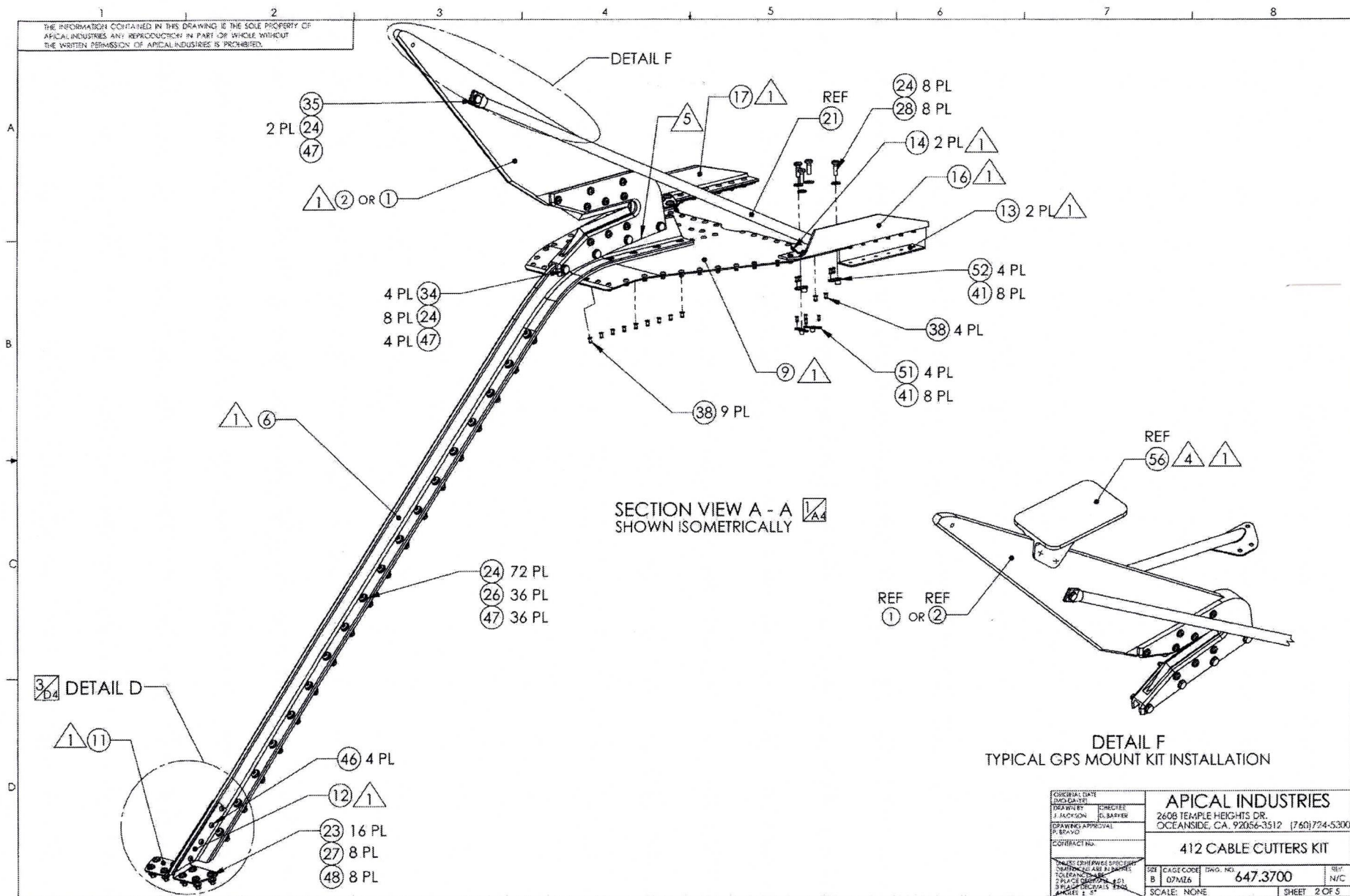
PARTS LIST

ORIGINAL DATE
08-24-07
DRAWN BY
J. JACKSON
CHECKED
D. HARRIS
DRAWING APPROVAL
08-24-07
CUTTER KIT NO.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
DECIMALS ARE TO 0.01
2 PLACE DECIMALS
ANGLES: 0.5°

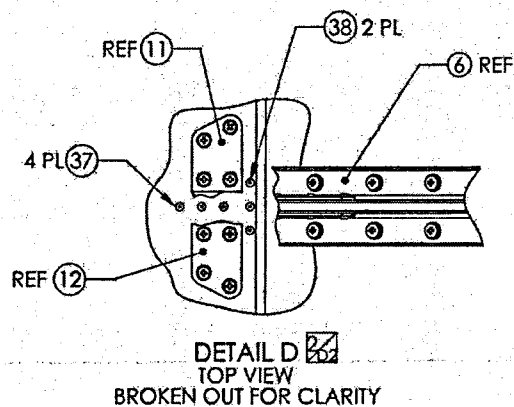
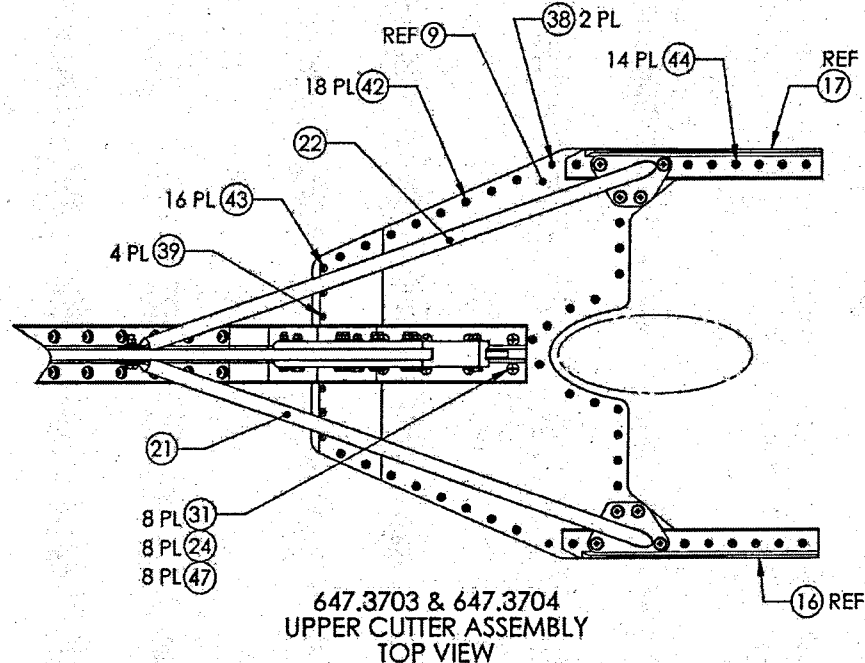
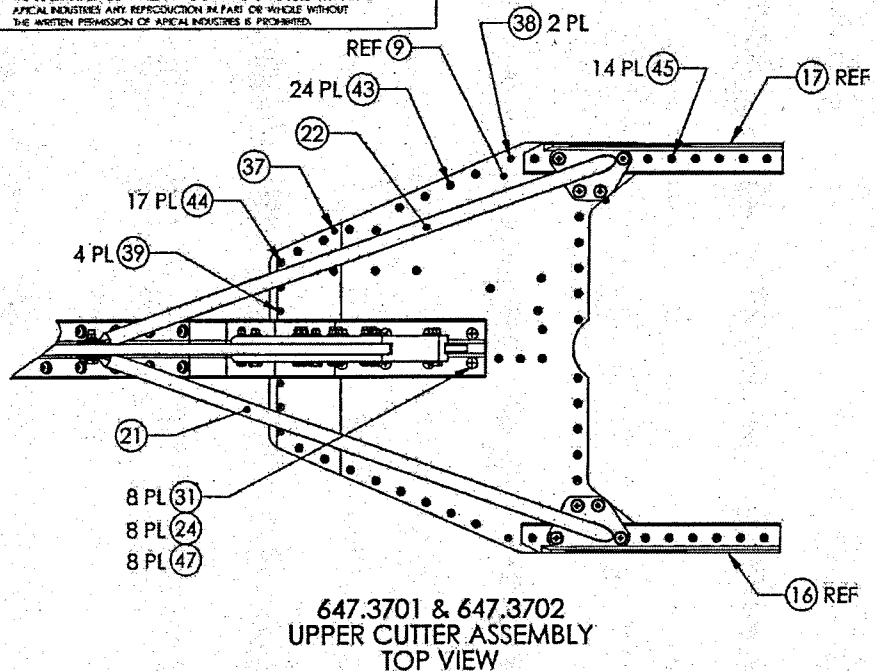
APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760) 724-5300
412 CABLE CUTTERS KIT
SCALE: NONE
SHEET 1 OF 5

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



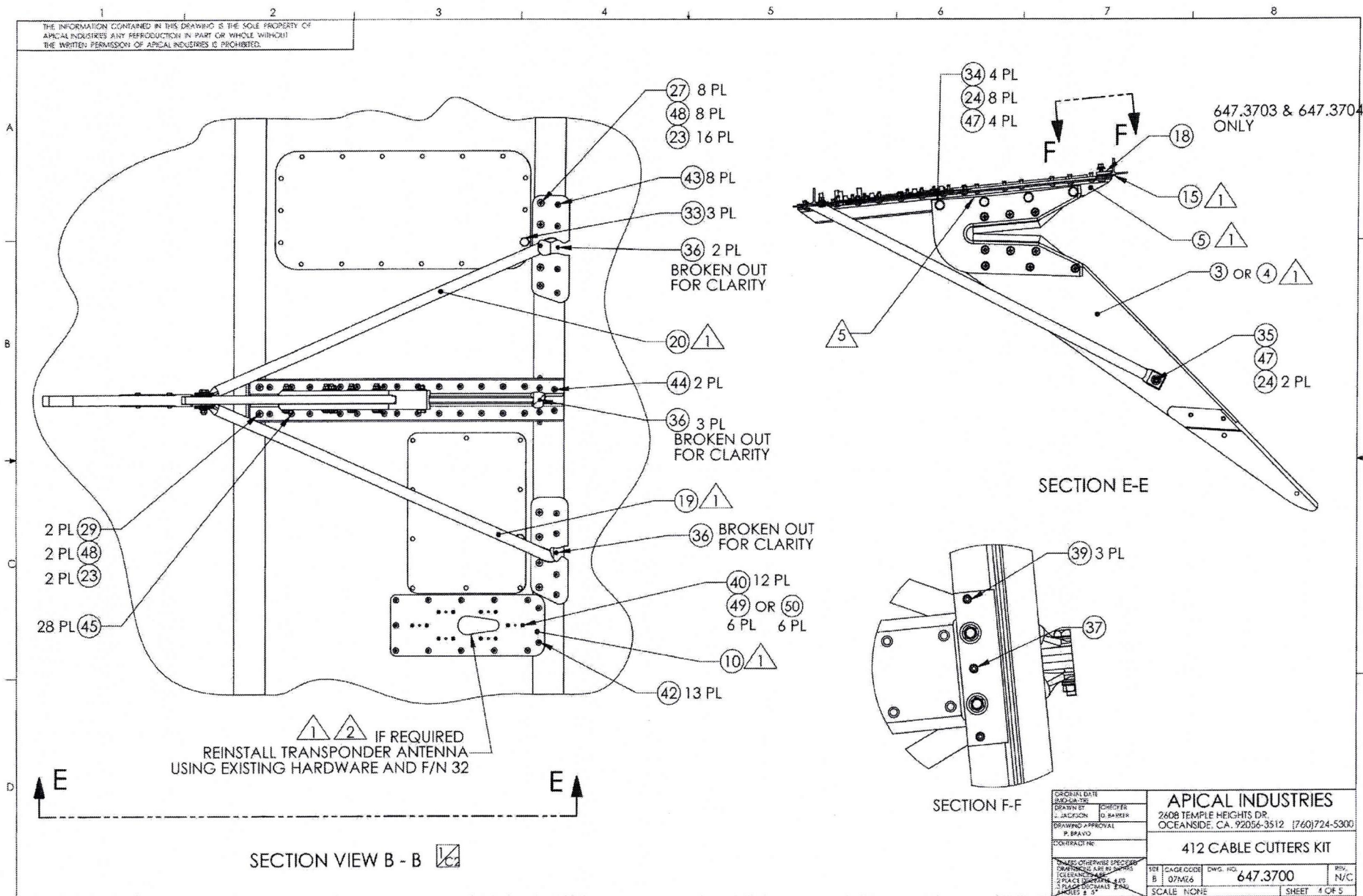
APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760)724-5300	
412 CABLE CUTTERS KIT	
ORIGINAL DATE 1/20/04 DRAWN BY J. JACKSON CHECKED BY G. BARKER DRAWING APPROVAL P. BRAY 2/28/04	SEE CASE CODE B 07ME6 SCALE: NONE
TOLERANCES UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACES DECIMALS .003 3 PLACES DECIMALS .001 ANGLES ± .5°	SHEET 2 OF 5

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



GENERAL NOTE BRO DA TO		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWN BY J. JACKSON	CHECKED BY D. BARTON	412 CABLE CUTTERS KIT	
DRAWING APPROVAL P. BRAYDO	CONTRACT NO.	W/C CAGE CODE B 07M2E	REV. N/C
UNLESS OTHERWISE SPECIFIED DRAWING IS IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES 1/16 0.001 1/16 1/16 1/16		ENG. NO. 647.3700	SHEET 3 OF 5
		SCALE: NONE	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES AND REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

BROKEN OUT FOR CLARITY
RH SIDE ONLY

1 LH ⑧
OR
1 RH ⑦

③①
②④
④⑦

②⑧ 3 PL
②④ 6 PL
④⑦ 3 PL

⑤③ TRIM TO FIT

②⑥ 3 PL
②④ 6 PL
④⑦ 3 PL

②⑤ 6 PL
②④ 12 PL
④⑦ 6 PL

DETAIL C 
LH SHOWN, RH OPPOSITE
2 PL

DESIGNED BY
J. JACKSON
DRAWING APPROVAL
P. BRAYD
CHECKED BY
D. BARKER

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA, 92056-3512 (760)724-5300

412 CABLE CUTTERS KIT

1. CHECK CHANGES SPEC PARTS
2. PLACE PARTS IN KIT
3. PLACE PARTS IN KIT
4. PLACE PARTS IN KIT

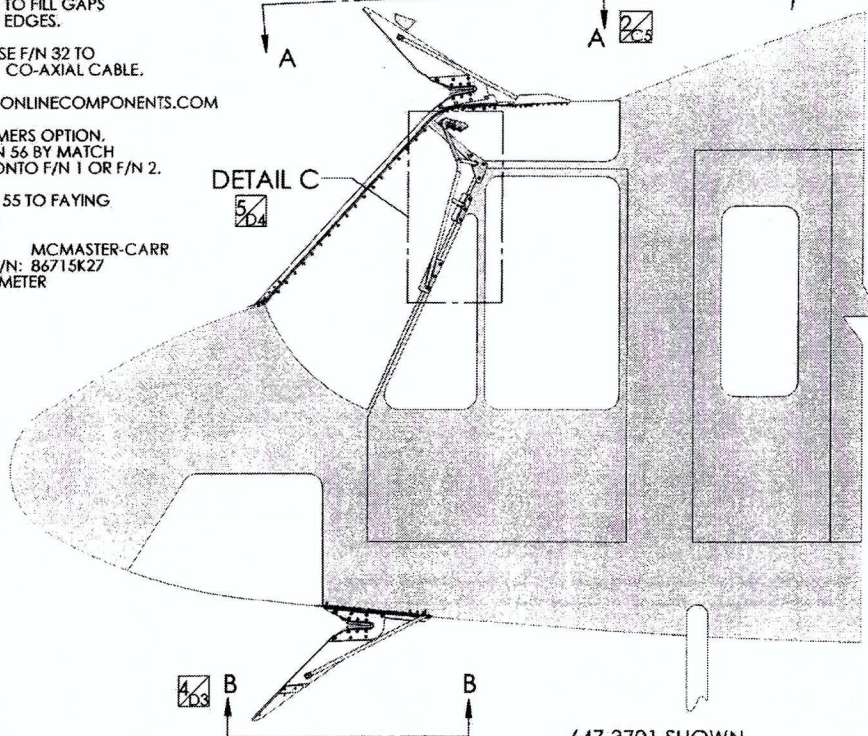
301 CASE COOK DWG. NO. 647.3700
8 07/2026
SCALE NONE SHEET 5 OF 5

REFERENCE ONLY

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NOTES:

- 1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.
- 2 IF REQD, USE F/N 32 TO CONNECT CO-AXIAL CABLE.
- 3 VENDOR : ONLINECOMPONENTS.COM
- 4 AT CUSTOMERS OPTION, INSTALL F/N 56 BY MATCH DRILLING ONTO F/N 1 OR F/N 2.
- 5 APPLY F/N 55 TO FAYING SURFACES.
- 6 VENDOR : MCMMASTER-CARR
VENDOR P/N: 86715K27
60A DUROMETER



647.3701 SHOWN

REF	REF	REF	REF	56	647.3701	GPS MOUNT KIT		
A/R	A/R	A/R	A/R	55	601.2045	RTV	LOCTITE 598	4
A/R	A/R	A/R	A/R	54	601.1012	SEALANT	PR-1425	5
1	1	1	1	53	601.3083	ADHESIVE RUBBER SEAL	ML-6-3065	6
4	4	4	4	52	601.2957	NUTPLATE	MS21071L3	
4	4	4	4	51	600.0795	NUTPLATE	MS21047-3	
6	6	6	6	50	601.3066	NUTPLATE	MS21047L08	
6	6	6	6	49	601.3065	NUTPLATE	MS21047L06	
18	18	18	18	48	601.2973	LOCKNUT	MS21042-08	
79	79	79	79	47	601.2943	LOCKNUT	MS21042-3	
4	4	4	4	46	601.2364	CHERRY RIVET	CR3213-4-8	
28	28	42	42	45	601.1183	CHERRY RIVET	CR3213-4-5	
16	16	19	19	44	601.1915	CHERRY RIVET	CR3212-4-4	
24	24	32	32	43	601.0790	CHERRY RIVET	CR3213-4-3	
31	31	13	13	42	601.1039	CHERRY RIVET	CR3213-4-2	
3704	3703	3702	3701	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.

UNINCORPORATED ECN(S)

017228, 04845, 048801

REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE REVISION PER		N/C
2	REVAL RELEASE	09-29-09	P. BRAYC

16	16	16	16	41	601.2207	NUTPLATE RIVET	CCR264SS-3-03	
12	12	12	12	40	601.2491	NUTPLATE RIVET	CCR264SS-3-04	
7	7	4	4	39	601.1066	CHERRY RIVET	CR3212-4-4	
17	17	17	17	38	601.1065	CHERRY RIVET	CR3212-4-5	
5	5	6	6	37	601.1604	CHERRY RIVET	CR3212-4-2	
6	6	6	6	36	601.3082	CHERRY RIVET	CR3212-4-1	
2	2	2	2	35	601.1874	BOLT	ANSI C10A	
8	8	8	8	34	601.2826	BOLT	ANSI 11A	
3	3	3	3	33	601.2823	BOLT	ANSI 4A	
1	1	1	1	32	601.3073	CONNECTOR	DSE-4440	3 2
8	8	8	8	31	601.2419	SCREW	MS24694CS3	
1	1	1	1	30	601.3070	SCREW	MS24694S49	
2	2	2	2	29	601.2893	SCREW	MS27039-08-1	
14	14	14	14	28	601.3069	SCREW	MS27039-1-09	
16	16	16	16	27	601.2263	SCREW	MS27039-08-08	
42	42	42	42	26	601.1365	SCREW	MS27039-1-10	
12	12	12	12	25	601.2198	SCREW	MS27039-1-07	
157	157	157	157	24	601.1607	WASHER	NAS1149F0303P	
34	34	34	34	23	601.2764	WASHER	NAS1149F1832P	
1	1	1	1	22	647.4313	RH UPPER STRUT		
1	1	1	1	21	647.4312	LH UPPER STRUT		
1	1	1	1	20	647.4310	LH LOWER STRUT		
1	1	1	1	19	647.4311	RH LOWER STRUT		
1	1	1	1	18	647.4212	PLATE		
1	1	1	1	17	647.4211	BRACKET RH		
1	1	1	1	16	647.4210	BRACKET LH		
1	1	1	1	15	647.4116	SHIM		
2	2	2	2	14	647.4115	SHIM		
2	2	2	2	13	647.4114	SHIM		
1	1	1	1	12	647.4113	CLIP		
1	1	1	1	11	647.4112	CLIP		
1	1	1	1	10	647.4111	DOUBLER		
1	1	1	1	9	647.4110	DOUBLER		
1	1	1	1	8	647.4011	WIPER DEFLECTOR LH		
1	1	1	1	7	647.4010	WIPER DEFLECTOR RH		
1	1	1	1	6	647.3915	DEFLECTOR		
1	1	1	1	5	647.4410	RAIL		
1	1	1	1	4	647.3804	LOWER CUTTER ASSY HIGH		
1	1	1	1	3	647.3803	LOWER CUTTER ASSY LOW		
1	1	1	1	2	647.3802	212 UPPER CUTTER ASSY		
1	1	1	1	1	647.3801	412 UPPER CUTTER ASSY		
						647.3704	204, 205, 212 CABLE CUTTERS KIT HIGH	
						647.3703	204, 205, 212 CABLE CUTTERS KIT LOW	
						647.3702	412 CABLE CUTTERS KIT HIGH	
						647.3701	412 CABLE CUTTERS KIT LOW	
3704	3703	3702	3701	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.

QTY
NEXT ASSY (S)

ORIGINAL DATE
04-28-10
DRAWN BY
J. JACKSON
CHECKED
D. BARBER
DRAWING APPROVAL
P. BRAYC
09-29-09
CONTRACT NO.

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300
412 CABLE CUTTERS KIT
647.3700
SCALE NONE
SHEET 1 OF 5